User Manual
TB 519 Telephone

The right connection.

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General information about your telephone

Please note

This telephone was designed exclusively for connection to Bosch Telecom telecommunication systems. It may not be connected directly to a public telephone network.

This telephone meets European requirements for safety and electromagnetic compatibility only when connected to a Bosch telecommunication system.

The equipment may only be opened or repaired by technically qualified personnel. Do not open the telephone yourself, which could damage the unit or cause it to malfunction.

Items delivered

Please check that you have received all the parts listed below as soon as you unpack the device.

You should receive:

- a telephone
- a handset
- a coiled handset cord
- a telephone connection cable
- emergency services sign
- a glare shade
- this user manual

Connectable extras

- A second handset via hand device interface (see P. 18)
- A second ringer to the telephone via a/b interface (see P. 18)

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Starting up

Installing the telephone

Choose a location where the telephone is protected from direct sunlight.

The TB 519 may be installed only as a **wall–mounted device** if installed in the bathroom or other moist areas.
Install the telephone in a location from which it **cannot** be used in moist areas such as the bath, shower or washbasin, even when the telephone cord is fully extended.
If installed in the bathroom or other moist areas, the original TB 519 cord must not be lengthened or replaced by a longer cord.

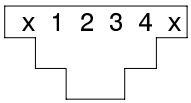
Your telephone is designed to be used under normal operating conditions. However, today's furniture is coated with a tremendous number of different paints and synthetics and is treated with a variety of different care products. Some of these products may contain substances that can penetrate and soften the synthetic base pads on the phone. The affected base may, under some circumstances, leave undesirable marks on the surface of your furniture.

Naturally, Bosch Telecom cannot assume liability for this type of damage. We therefore recommend that you place your phone on a non--slip base, particularly if the respective furniture is new or has been restored with special products.

Setting up the telephone

The TB 519 analog telephone may only be operated as a subscriber's extension device. It must be connected correctly to prevent malfunctions. It is configured by universal connection (UAE), as is usual for analog terminal devices.
If the telephone is connected with reverse polarity, the LED will illuminate continuously.

Configuration of the telephone connection socket (viewed from telephone underside):



x	no contact
1, 4	contact unassigned
2	a–line
3	b–line

Connecting the telephone

Connecting your telephone is very simple. You can then make calls straight away.

Connecting the handset and telephone with the coiled handset cable:

On the underside of the telephone:
Insert the plug on the long end of the coiled handset cable in socket 1 until it engages. Then insert the handset cable in the guide (press in edgeways and turn flat).

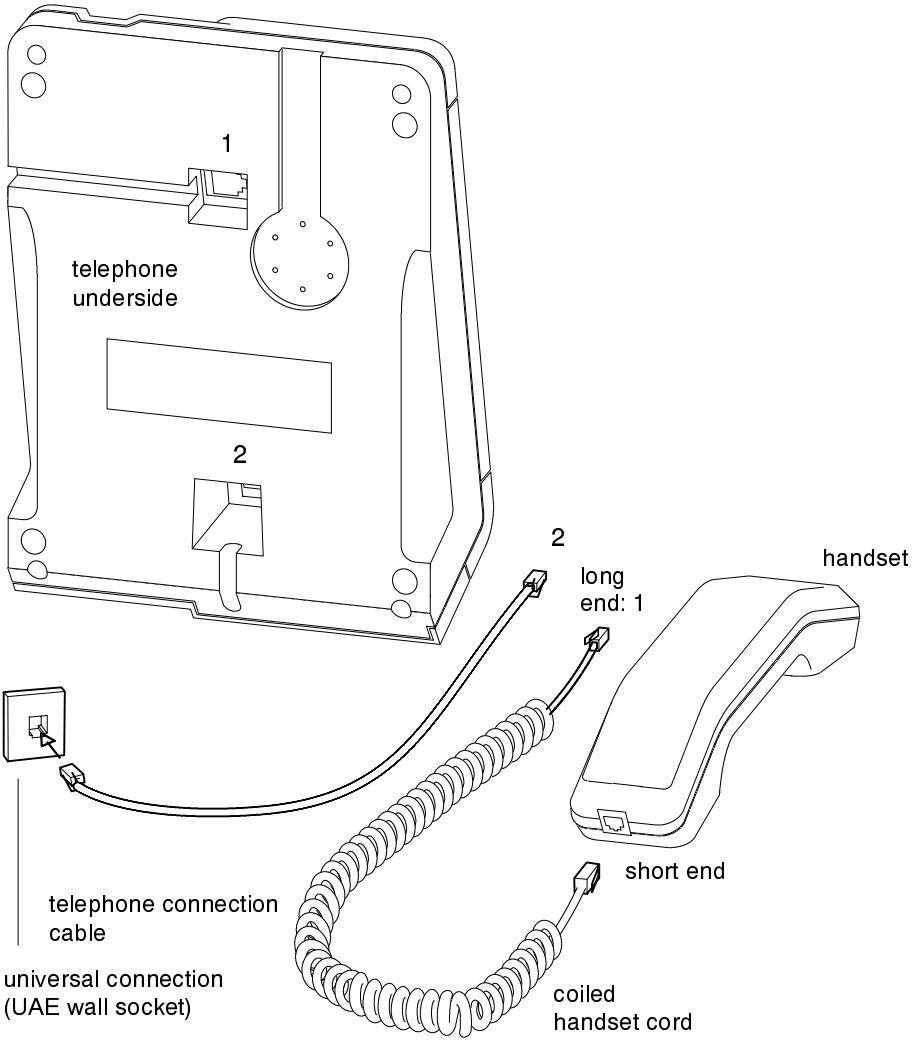
On the lower end of the handset:
Insert the plug on the short end of the coiled handset cable in the socket until it engages.

Connecting the telephone to the connection cable:

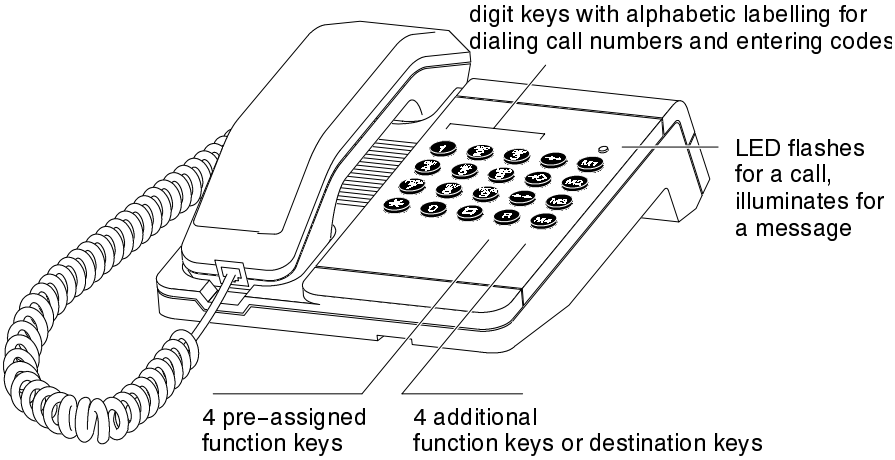
On the underside of the telephone:
Insert one plug of the telephone connection cable in socket 2 until it engages. Then insert the cable in the guide (press edgeways and turn flat).

At the universal connection (UAE wall socket):
Insert the other plug of the telephone connection cable in the UAE wall socket until it engages.

The default setting of your telephone is the DTMF dialling mode with flash (80 ms).



TB 519 overview



What you should know about your telephone

You can naturally use your TB 519 to make calls as you would with any ordinary phone. But this telephone also offers a variety of functions that make phoning even easier.
Additional functions may be used in connection with an in–house telephone system. These functions are not explained in this quick reference, however.

Making calls	You can enter the individual digits of a call number manually. Up to 10 frequently dialed numbers can be stored for speed dialing and then dialed at the touch of a button any time. You can also store an additional 4 numbers for destination dialing, depending on the configuration.
Receiving calls	Your telephone rings as usual when someone calls you. The LED above the keypad also flashes.
Message	The LED also illuminates if there is a message for you in your Integral telephone system.
Additional information	Please contact your authorised system administrator for further-information on how to use your telephone system.
Maintenance	Wipe your telephone clean with a damp anti–static cloth as needed. Never use a dry cloth, as this could cause your telephone to malfunction. Never use harsh or abrasive cleaners to clean your phone.

Overview of keys

Digit keys with alphabetic labelling

Digit keys with alphabetic labelling for dialing call numbers and entering codes. The alphabetic labelling enables you to dial by letter as well as by number (vanity-numbers).

“Star” and “Hash” for special functions.

Function keys

“Speed--dial” for dialing the 10 stored speed--dial - numbers.

“Programming” to initiate and terminate programming sessions.

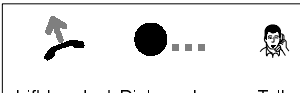
“Redial”. To dial the most recently dialed number.

“Refer back” for consultation calls with other subscribers in your telephone system.

Function keys. You can use these keys to dial stored numbers (destination dialing) or activate functions, depending on your telephone system and its default settings.
These keys have already been assigned functions in the factory (A, B, C, D functions).

How to use your phone

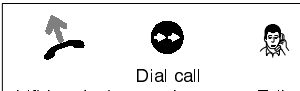
Making calls



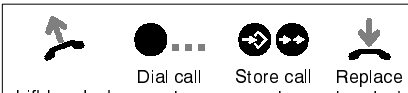
Refer–back

Accessing a message

Redialing

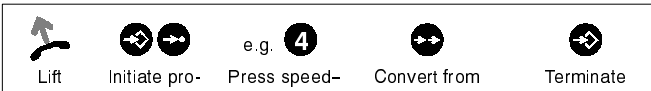


Storing selected redial numbers

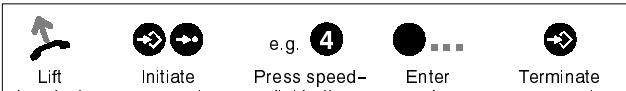


Dialing selected redial numbers

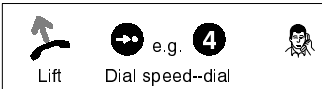
Converting stored redial numbers to speed–dial numbers (max. 16 digits)



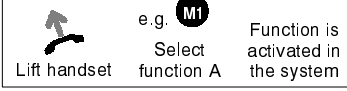
Storing speed–dial numbers (max. 16 digits)



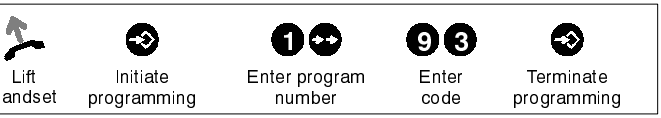
Dialing speed–dial numbers



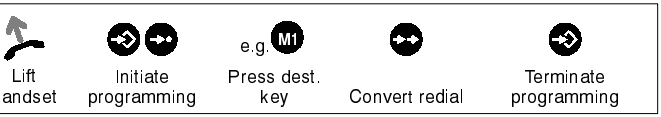
Using keys M1... M4 as functions A... D



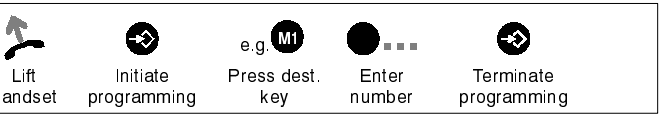
Using function keys as destination keys



Converting stored redial numbers to speed-dial numbers

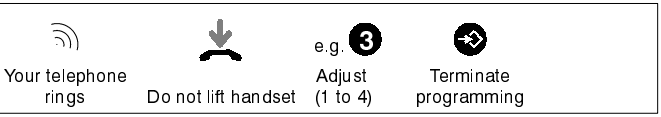


Storing destination numbers (max. 16 digits)

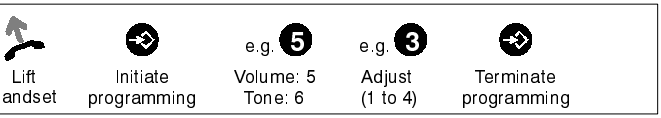


Dialing destination numbers

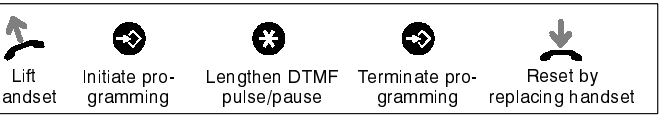
Adjusting volume during ringing



Programming volume and tone



Temporarily changing DTMF pulse/pause lengths



What else you should know about the individual functions

Making calls

If you wish to make an external call, you must first occupy an exchange line. You can do this in various ways, depending on your telephone system. The alphabetic labelling of the digit keys enables you to dial by letter as well as by number (vanity-numbers).

Refer–back

You can use this function to talk to a party within your in–house telephone system during an already existing call.

Redial

The redial function calls the last number you dialed. This number can contain up to 20 digits. Selective redial lets you redial a call number that you have stored specifically for this purpose. Numbers that you have dialed using a destination or speed--dial key cannot be redialed with the redial button.

Converting redial numbers

You can use this function to store the call number currently stored in the redial memory permanently under a destination or speed--dial key. This number can contain up to 16 digits. If a number has already been stored under a particular key, this number will be overwritten by the new one.

Program-ming

You must always press the „Programming“ key to begin and end programming. This is the only way to store your entries permanently.

Function keys M1 to M4

The function keys M1 to M4 may already be assigned permanent functions (A, B, C, D functions) depending on your system.
These functions can then be executed by simply pressing the corresponding key. You can also re--assign these keys if you wish to use them as destination keys.

Destination dialling

If you have set up the function keys M1 to M4 as destination keys, you can permanently store a call number under each of these keys. This number can contain up to 16 digits. If a number has already been stored under a particular key, this number will be overwritten once you enter a new call number. You can dial these destination numbers by simply pressing the corresponding key. Subsequent dialing is also possible.

Speed–dialing

You can store a directory number under each of the digit keys (0–9). This number can contain up to 16 digits. If a number has already been stored under a digit key, this number will be overwritten once you enter a new call number. Speed–dialling also permits subsequent dialing.

DTMF dialing method

The multiple frequency dialing method (DTMF) is a modern dialing method by which digit inputs are converted to tones of varying pitch.

Entering external line code

Depending on your telephone system, you may have to enter a digit or press the „Refer–back“ key to occupy an external line. You can also enter up to 3 external line codes (ELC). Each of these codes contain up to 3 digits. You can separate the individual external line codes by pressing the „Redial“button.

Loop disconnect - code

If your telephone system is connected to another telephone system, enter a loop disconnect code (LDC). This code can be up to 3 digits long. You can obtain this loop disconnect code from your authorised system administrator.

Setting a dialing pause

It may be necessary to set an dialing pause after external line codes / loop disconnect codes (ELC/LDC) to ensure that your phone system dials call numbers properly.

Switching off the handset

You can use the „Programming“ key to switch off the handset during a conversation. Your partner will no longer be able to hear you.
You can switch the receiver back on by pressing the „Programming“ key again.

Codes for Integral 3 / Integral 33

Many functions of the Integral 3 or Integral 33 telephone system are executed by means of codes or the A, B, C, and D functions. These may vary from the following in some cases. Your system administrator can provide you with more information, if necessary.
Please consult the "Integral 3 or Integral 33 telephone system" operating manual for further information on individual operating procedures.

Overview of codes

Function	Code	In your system
Activate function	*	
Deactivate function	#	
Code dial	7	
Forward to your telephone	13	
Forward to an external telephone	14	
Pick--up call	23	
Group line	11	
During a conversation		
Conference	4	

Programming the telephone

In the following overview, the respective factory setting is given in parentheses, e.g. *(factory setting: empty)* .

If you make a mistake during programming, please replace the handset. Then reset to the **factory settings** (your stored destinations will also be erased).
Each programming step can also be carried out one at a time, to configure your individual settings. Your stored destinations will not be lost.

Factory settings

Lift handset.

Press the „Program“ and „1“ keys to initiate programming.

Press the „Redial“ key.

Enter **code „250“ to erase all memories and reset to factory settings.**

Press the „Program“ key to end the programming procedure.

Setting external line code / loop disconnect code (ELC/LDC)

(max. 3 digits)
(factory setting: empty)

Lift the handset.

Press the „Program“ and „0“ keys to initiate programming.

Press the „Redial“ key.

1. Enter the ELC.

as needed

Press the „Redial“ key.

as needed

2. Enter the ELC.

as needed

Press the „Redial“ key.

as needed

3. Enter ELC.

as needed 2 x — Press the „Redial“ key twice.

as needed — Enter the LDC.

Press the „Program“ key to end the programming procedure.

Adapting the telephone to your telephone system

Lift the handset.

Press the „Program“ key to begin the programming procedure.

1 5 9 0 — Enter the code.

Press the „Redial“ key.

e. g. 9 6 — Enter the code for the desired function, e. g. „96“ for „Flash = 250 ms“.

as needed — Press the „Redial“ key again to enter a further code from the table below, if desired.

Press the „Program“ key to end the programming procedure.

You can enter the following codes here:

-- DTMF 90/90 * (factory setting)	92
-- DTMF 90/140	93
-- Flash = 80 ms * (factory setting)	94
-- Flash = 100 ms	95
-- Flash = 250 ms	96

* applies to Bosch TC systems

Modifying factory settings

Lift the handset.

1 — Press the „Program“ and „1“ keys to initiate programming.

Press the „Redial“ key.

e. g. 2 5 1 — Enter the code for the desired function based on the following table, e. g. „251“ to erase all speed-dial memories.

as needed — Press the „Redial“ key again to enter another code from the table below, if desired.

Press the „Program“ key to terminate the programming procedure.

You can enter the following codes here:

Dialing pause (1 second)

-- 1 second pause after ELC/LDC	020
-- 3 second pause after ELC/LDC	021
-- freely adjustable pause after ELC/LDC and pause length 1 (1 sec.) to 0 (10 sec.)	029

Dialing procedure (DTMF/Flash)

-- DTMF/Flash	037

Erase memory

-- erase all memories and reset to factory settings	250
-- erase all speed--dial memories	251
-- erase all destination memories	252
-- erase all ELC and LDC	253
-- erase all memories	258

Function keys (A, B, C, D)

-- DTMF:	A, B, C, D	92
-- DTMF:	4 destinations	93

Setting ringing tone

(factory setting: volume 4, tone 1)

Lift the handset.

Press the „Program“ key to begin the programming procedure.

e. g. 5 — Enter the code for the desired function:
-- Volume: 5
-- Tone: 6

e. g. 3 — Enter a digit between 1 and 4 for the desired setting.

Press the „Program“ key to terminate the programming procedure.

Storing a speed–dial destination (max. 16 digits)
(factory setting: empty)

Lift the handset.

Press the „Program“ and „Speed--dial“ keys to initiate programming.

e. g.
Press the digit key (0...9) under which you wish to store a call number.

Enter the call number.
You can also press the „Redial“ key instead, to transfer the call number from the redial memory.

as needed
Press the „Speed dial“ key again to store a further speed--dial destination, if desired; use a digit key (0...9) and enter the call number.

Press the „Program“ key to end the programming procedure.

Note:
You can also store the „Star“ and „Hash“ key codes.

Allocating destination keys M1 to M4 (max. 16 digits)
(factory setting: empty)

Lift the handset.

Press the „Program“ key to begin the programming procedure.

e.g.
Press the destination key (M1...M4) under which you wish to store a call number.

Enter the call number.
You can also press the „Redial“ key instead, to transfer the call number from the redial memory.

as needed
Press a further destination key (M1...M4) and enter another call number to store under it, if desired.

Press the „Program“ key to terminate the programming procedure.

Note:
You can also store the „Star“ and „Hash“ key codes.

Technical data

Line interface:	Analog (a/b line, polarity–dependent due to LED)
Power supply:	Via telephone line
Call frequency:	25 to 50 Hz
Call voltage:	Min. 32 V_{eff} at 25 Hz Min. 25 V_{eff} at 50 Hz
Loop current:	Min. 19 mA
Signal key:	Flash
Dialing procedure:	DTMF
Connection plug:	Western plug (UAE configuration a/b middle)
Operating temperature:	0 to 40° C
Weight:	Approx. 650 g
Second handset:	T1 model
Second ringer:	Electronic internal bell or high current relay on a/b